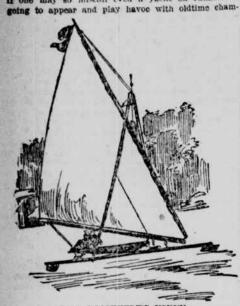
OWNERS HOPING FOR COLD WEATHER.

RIVER FREEZES EARLY-DISCUS-

soming season's sport. Already they are looking Roosevelt, commodore of the Hudson River Yacits coming season's sport. Already they are looking Roosevelt, commodore of the Hudson River Yacits coming season's sport. Already they are looking Roosevelt, commodore of the Hudson River Yacits commodore of the Hu teady wind with it, and allow some first-class yacht-There is a well-founded belief that a dark horsemay so miscall even a yacht on runners-is



J. A. ROOSEVELT'S VIXEN.

The success of the newcomer, whether ateen all or cat-rig, would mean a radical change in rig all ong the Hudson. Se a large number of enthusiastic nen would be badly "left," and to get left in s port where a mile in forty-seven seconds is only sort of jog-trot is no small matter. To members of famous Hudson River Ice Yacht Club, therefore, the three modest little buildings standing at intervals
along the bank of the Hudson between Poughkeepsie and Hyde Park will soon be objects of absorbing in

These buildings are the club's stations, and contain the greater part of the finest ficet of ice-yachts in world-numbering fully half a hundred sail. Few or none of the travellers on the Hudson River Railroad who speed by the club station at Roosevelt Point know the unique contents of the tightly closed little building but when the Hudson succumbs to the cold snap which is almost certain to appear sooner or later in winter, and the river shows an expanse of



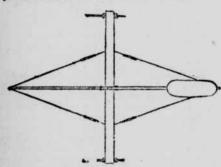
CLUB STATION AT HYDE PARK.

ice from Albany nearly down to Manhattan Island, the yacht house doors at Roosevelt Point, and a couple of miles above Crum Elbow, fly open; yachts come forth, pennants flutter, and for a brief season the speed of railroad trains sinks into insignificance. The sport may last only a few days-hours, perhaps-but brief as it may be, its devotees declare that there is nothing in the wide realm of sports to equal the glorious exhilaration of ice yachting-and though the yacht may be in commission only a few days, yet it must be admitted the tee yacht offers some port of impensation over her water sister, in that small caris required when the boat is out of commission. It is merely a matter of taking apart the simple frame and packing it away on a shelf until the next senson's

cold snap permits another spin.

Poughkeepsie has been the centre of interest for this sport in the past, and though her glory in that respect has rather departed of late, the interest lines merely passed to neighboring towns, and Carthage. New-Hamburg, Rondout, Hudson and Tappan Zee Ice Yacht Clubs are flourishing organizations, while the Hudson River Ice Yacht Club with the stations already referred to far surpasses all the others in membership and fleet. Although there are clubs mear New-York notably at Orange Lake, N. Y.; Queedo, N. Y., and Shrewsbury River, N. J., yet they are not comparable with the Hudson River organizations. To the latter are due all advances in construction and rig-indeed the whole principle of the ice yacht practically originated along the Hudson, for its only foreign prototype

Like all other inventions, however, the ice yacht has been evolved from crude beginnings, and each



fact that triffing alterations have produced remarkable results. In 1881 the Great Scott sailed up the river, defeated her competitors with the utmost case and her competitors with the utmost ease, and established a new model. To this the river clubs have adjusted themselves, but now there is an uneasy feeling among the yacht-men that possibly another change is impending which may suddenly make them back numbers again. It means just that if the Ranger should win the championship this winter, for the Ranger is the exponent of the "new idea," and to be a back number every few years is an expensive luxury, as a fine ice-yacht costs \$1,000 without mentioning the incidentals. This time the new idea i more in rig than model. It is nothing less than the lateen sail in practical form against the prevailing lib and mainsail. The discussion within the Hudson River Club is already interesting, and the members have been shifting about at a great rate in the dis

Some years ago Colonel E. Harrison Sanford, now o Paterson, N. J., an enthusiastic yachtsman, concluded lateen sail would be an ideal rig as the sail could thus be made perfectly flat, a much-needed requisite in ice-yachting, and one difficult to approach in the lib and moin-att the jib and mainsail. Accordingly Colonel San



To the Tribune's correspondent Commodore crinnell the jib and mainsail. Accordingly Colonel Sanths eag and the catering.

SIDE VIEW OF FRAME.

SOMEHOW the Avalanche, rigged with an enormous lateen sail, and prepared to "do or die." Somehow the Avalanche was not a formédable competitor. Everybody admitted the magnificent rigidity of the enormous lateen sail, with its 84 square feet of canvas, which was as fint as a drumhead, but the terrible weight of the great spar required to hold this sail seemed to offset every ndvantage. Colonel Santford stuck to his per, however, and declared that the lateen sail, being so heavily weighted, required a high wind, and if he could only get that he would smuss every record on the river.

Season after season passed without the coveted wind, but it came at length, and the great Avalanche wind, but it came at length, and the great Avalanche became unmanangeable, rearred, threw her owner, and so disgusted him with his invortice that he declared he had anough lateen, and mado the Avalanche over into a regulation jib and mainsail, of which rig there is now no stancher supporter than Colonel Sanford. All this happened three seasons ago.

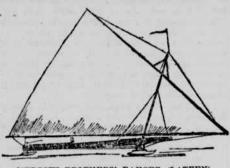
That very senson there appeared on the lee-yachting horizon a cloud—so to spenk—in the shape of a small yacht from Carthage Landing, just down the lifety of the carthage and anough lateen, and mado the Avalanche over into a regulation jib and mainsail, of which rig there is now no stancher supporter than Colonel Sanford. All this happened three seasons ago.

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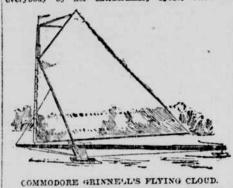
place, who had observed the good points of the fill-fated Avalanche, and shrewdly eliminated some of the defects. Instead of permitting the inevitable spar to be the handleap it had been, they took this bull by the horns and made the spar the backbone of the boat. They also introduced a wire rope running up over the sail and down ragain, by which the lateen sail could be hauled up, made fast, and then let off. By this good ice-vachting season. The finest one we ever

WELL-KNOWN ICE YACHTS. slauple device the whole rig of the boat, the balance. IT WILL BE AN INTERESTING SEASON IF THE peared of Hampton Roads† Colonel Sanford, having just made his boat over and abandoned the lateen Ice yachtsmen are greatly interested in the result of lateen sail, became suddenly doubtful, and John A.



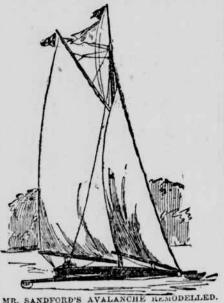
on the ice, however, Merritt Brothers having built a larger exponent of their idea, the Ranger, with a sail area of 525 square feet, and thus a formidable an-

The Ranger entered the races and was surprising everybody by her extraordinary speed, when she



broke down. Many, including Mr. Roosevelt, declared that this mishap alone prevented the Ranger from have also taken a more sensible view of the situation winning an easy victory. The question of the real than was generally anticipated, and Mr. Von der Ahe occurrence of a new idea in ice-yachting is therefore and still unsettled and under discussion, and that is why taken a wiser view of the matter than was expected. 1892 is looked forward to so eagerly. The Merritts have put the Ranger in good trim and increased the length of her runner-plank. They are naturally deeply interested in the success of their new venture and emphatically declare the Ranger to be a model vacht

To a Tribune reporter they explained the difference between the Ranger and the old Avalanche model briefly as follows: "The Ranger is superior to the former lateen rig, because she carries about the maximum limit of sail that a lateen-sail yacht can stand.



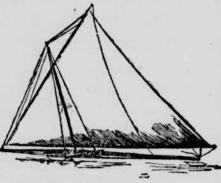
MR. SANDFORD'S AVALANCHE he old Avalanche carried too much. anced, and therefore proper handling was impossible.

Mr. Roosevelt has this season improved the Vixen by adding two feet to her runner-plank, making it measure nineteen feet, and is eager to prove her superiority, even over larger antagonists.

Colonel Sanford, though the Avalanche fails to accomplish much in her new dress, still pooh-poohs the lateen sail. Although most of the other members of the Hudson River Club are nominally on the jib and mainsail side of the controversy, they are by no means confident. Archibald Rogers is said to view the Ranger with much apprehension, and George Buckant, of Poughkeepsie, who, since his father's retirement, is the only professional ice-yacht builder in the world, openly favors the chances of the Ranger-"I have great fears of that boat," he said to Mr. Roosevelt, a few days ago. "I advise you to build "If I do."

a better one," answered the Commodore. "If I rejoined the builder, "you must supply a new of men with more 'sand' to sail her. There PLAN OF FRAME OF ICE YACHT.

RECESSIVE advance has been the subject of eager debate among enthusiasts in the sport. Observing the changes in yacht construction, one is struck with the changes in yacht construction, one is struck with the changes in yacht construction, one is struck with the changes in yacht construction, one is struck with the changes in yacht construction, one is struck with the changes in yacht construction, one is struck with the changes in yacht construction, one is struck with the changes in yacht construction, one is struck with the changes in yacht construction, one is struck with the changes in yacht construction, one is struck with the



AVALANCHE WITH A LATEEN SAIL.

yacht, which he believes will show extraordinary speed. There is no more enthusiastic yachtsman along the Hudson than Commodere Grinnell, and it is silent that he is going to do his part toward making e coming season noteworthy. To the Tribune's correspondent Commodore Grinnell

us expanined the cat-rig.
"My new cat-rigged ice-yacht Flying Cloud is near-

simple device the whole rig of the boat, the balance, so to speak, was changed. It need hardly be said that the appearance of the Vixen created a flutter among ice-yachtamen. Her performances were certainly remarkable. Had a new Monitor appeared off Hampfon Roads! Colonel Sanford, having Just made his boat over and abandoned the lateen sail theory for good and all, emphatically said no, but others, who never before had believed in the Idees sail, became suddenly doubtfal, and John A. Roosevelt, commedore of the Hudson River Yacht Club, was so impressed with the principle and model and the preserved the allegance in the boom, which the lateen sail. We always wind, but claimed that it evaluates the conting model and ris for speed.

MERRITT BROTHERS' RANGER (LATEEN). of the Vixen that, although the owner of several fire yachts, one of them holding the championship, he purchased the Vixen and became a convert to new idea.

Then came the summer-like winter of 1889-90, a blank in the history of ice-yachting, and last year appeared merely to intensity the uncertainty. The Vixen is a small boat, with but 335 square feet of sail, hence no competitor for yachts of the first class, on the lonework packts on the lene, however, Merritt Brothers shaving built a larger exponent of their idea, the Ranger, with a sail heave exponent of the little dealers, with a sail heave exponent of their idea, the Ranger, with a sail heave exponent of their idea, the Ranger, with a sail heave exponent of their idea, the Ranger, with a sail heave exponent of their idea, the Ranger, with a sail heave exponent of their idea, the Ranger, with a sail heave exponent of the little as for many the cases of the weight of the plank in the Vixen is a small boat, with but 335 square feet of sail, hence no competitor for yachts of the first class, on the lock have the probability of the boung the probability stanter, or work partition, or gene miles and the probability of the boung the plank in the vixer and the vixer is a small boat, with but 335 square meed was the winter of 1872. I hope '92 will well.

NOTES ABOUT ATHLETES.

BASEBALL MEN RETOICE AT PEACE.

AFFAIRS AMONG THE CLUBS-" ENTERTAIN-MENTS" WHICH NEED MENDING.

Now that peace is assured in the baseball world the interest in the National game is much greater than it has been for many months. John T. Brush has come out in a new role and has stepped into the shoes formerly occupied by "white-wings" Thurman. Mr. Brush is an unassuming, diplomatic man of not very prepossessing appearance. He wears a 7 1-2 hat, and his head is full of eighteen-carat brains. Probably to him more than anybody else the present happy condition of the baseball world is due. He has worked quietly and unceasingly in his effort to bring about the settlement of the war which has done so much to cause a diminution of interest in baseball for the last two years. He has been ably assisted by President Byrne, of the Brooklyn Club, and President Robison, of the Cleveland Club. The American Association men Vonderhorst and other Association men have also taken a wiser view of the matter than was expected. The settlement will undoubtedly place basebail on a stronger footing than it ever was before. Hereafter there will be one great league which will be recognized as the first basebail organization of the world. Then a Western, Eastern and International Association will be formed which will work in harmony with the great league. As soon as the circuits of these organizations have been fully made up a State, interstate and smaller leagues will get into working order for the season of '92. A few weeks ago the prospects of the New-York Club

did not look so bright, but now they certainly appear better than probably ever before. Mr. Powers has been working earnestly, and the directors of the club have given him every prerogative in getting up a first-class There is a bare chance that Richardson and Rusie may return to the club; but nobody is wasting any sympathy upon Connor, Glasscock, Buckley and Whistler; in fact, the directors and a majority of people who follow baseball in the metropolis do not care a rap whether these four men ever play here again or not. Cornor and Glasscock especially have shown themselves to be ungrateful, and with further connection in baseball in New-York would probably be a detriment to the club.

The rumors of a disastrous war in the Amateur Athletic Union do not look so formidable at present as they did a few days ago. Amateur athletes all over the country recognize that their sports must be governed by some capable and powerful organization, and while they are not all satisfied with some features of the Union they recognize that the best policy would be to remain loyal to the Union until some stronger body is organized to take its place. Still, the continual effort being made by clubs and being demanded by athletes to give costly prizes should be discouraged; it is not in the spirit of pure amateur sport. One young athlete last year is said to have won \$2,000 in prizes as well as two handsome pianos. This young man lives in a small cosey flat, and his friends would like to know what he is going to do with two planes. The Union has an opportunity to strengthen itself by enforcing its rules in relation to strengthen itself by enforcing its rules in relation to the asinctes who competed in the recent 7th Regiment sames. Every athlets who took part in those games games. Every atmete who took part in these games should be disquantified and should not be reinstated under any circumstances for at least one year. The Union will weaken its position if it takes any other course. A firm stand on several important questions will soon cause the dissensions to blow over.

> The management of the majority of boxing entertainments is more than faulty. The professional show at Madison Square Garden on Thursday night brought out features which even a metropolis like New-York can very well do without. It is safe to say that among the crowd in that handsome amphitheatre were numbered about every "crook," pickpocket and burglar in the neighborhood. Of course there were representative men present, some of them high up in official and social life, but that does not contradict the assertion made above, for such enter tainments will invariably bring together the worst tainments will invariably bring together the worst element. The Cahili and Butler fight in Brooklyn on Wednesday night was little short of disgraceful, and it looked at one time as if there would be a fight between the principals, their seconds, the pokee and the whole assemblage. Cahili was a popular favorite, but Butler won the fight; the referee and judges, however, seemed more diplomatic than just and decided a draw. Another ridiculous feature is appointing professionals to officiate at amateur entertainments.

One of the bright features of the 12th Regiment athletic games last Monday night was the pluck ex-hibited by Ernest Hjertberg in winning the one-mile race. There were just 52 men who started in that race, and as Hjertberg was the scratch man he could not start until all that motley crowd had been packed in around that 12-lap track. There was not enough oom for an eel to wiggle itself through, and when his friends saw the crowd they simply threw up their hands and said their favorite had no chance. berg, however, took matters easily for about six laps, or one-half mile, and then when the weak ones began to fall out he gradually improved his position and took the lead on the last lap and really walked in. It was a remarkable performance. The contest for the safety bicycle races also showed that something ought to be done to make this sport safer. A safety bicycle race on a level wooden floor is one of th lateycle race on a level wooden floor is one of the most dangerous of modern pastimes. It would probably be a good idea for safety machines to be excluded from indoor sports, and if athletic associations must give bicycle races the contestants should be compelled to race on the old-fashconed ordinary bicycle or high-wheel machine. A man can take a corner on an ordinary machine when he cannot do it on a "safety." There were probably a dozen ugly falls in the two-mile race on Monday night, and it was maraculous that some of the men were not badly injured.

The Berkeley Ladies' Athletic Club, at its handso headquarters on Forty-fourth-st., has become a popular institution. The first of a series of five enter tainments was given at the clubhouse on Wednes day afternoon, and it was a complete success. This is one of the few institutions of its kind in this country and its future success seems to be assured.

next season will probably consist of six clubs instead of eight. The New-York Athletic Club, discouraged with its ill-success on the green-diamond field, he about abandoned its idea of putting a team in th neld next season. Still, even without the New-York club, a good amateur league can be organized, con-sisting of the four clubs which made up the Amateur League last season, with the Orange, New-Jersey and Manhattan clubs added. This, of course, would make seven clubs altogether, and in case one should decide to drop out, six good clubs would remain. field next season. Still, even without the New-York

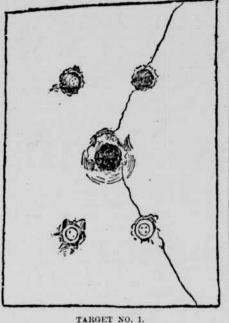
Another unnatural and brutal exhibition will take place at Madison Square Garden this week, when an international tug-of-war tournament will be offered Christmas week attraction. The tug-of-war is grad nally losing caste among reputable amateur athletes. and it is only a question of time when it will be elim mated from all reputable athletic entertainments There is no beauty, no sense nor excuse for an exhibit ion of this kind; it simply means awo or more men tur ging at a long rope straining themselves, and in many cases dislocating ligaments and muscles and taking them from doing reputable labor for of their lives. A bull-light is not more burnal. T have been predicting a tremendous success tournament which begins to-morrow, will find their predictions for from the mark.

MAKING TOUGH ARMOR.

THE WONDERFUL AMERICAN PRODUCT.

TESTS WHICH HAVE PROVED ITS SUPERIORITY-PROCESS OF HARDENING.

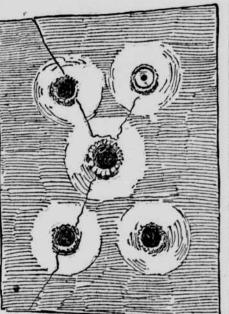
"By far the most momentous question which the Department has had to consider in connection with the construction of the new Navy is that of armor: first, to secure a supply of American manufacture; and, secondly, to determine what kind of armor should be adopted, having reference both to its composition and mode of treatment." This paragraph is quoted from Secretary Tracy's report submitted to Congress on the first day of the present session. The term 'armor' is applied to the metallic protection of ships



which the increased power of modern artillery ha made necessary, the ultimate object being to attain the greatest amount of protective power with the least possible weight. Ent the number of manufacturers of armor is exceedingly limited in consequence of the cost of plant and the skill and experience required.

Some writers anxious to criticise those who have given so much importance to the tests of armor have asserted that because some of the plates were partially pierced through by the projectiles used, the armor was useless, since the penetrating power of modern artiflery is superior to the resistance of modern armor plating. But the circumstances attending the tests at the proving grounds are very different from those in battle. In target practice at proving grounds the fire is normal, the guns are on fixed platforms, and the range only a few feet-that is, the muzzle of the 8-inch gun is only fifty-four feet two inches, or forty inches nearer the 6-inch rifle, distant from the of the plates toward which it was The projectile, weighing 100 pounds, is steelpointed and strikes with a velocity of about 2,100 feet a second, and an energy of a little less than 3,000 foot tons. In battle where the range is great, the armor fitted to the ship is constructed to present the least amount of normal surface, and the attacking gun and moving ship are ever changing their positions. In a sea-fight, armor does not lose its power of resistance, while the gun, on the contrary, loses much of its power in an attack.

In the summer of 1886 advertisements were published by the Navy Department for armor and gun steel for the ships then authorized. These advertisements stipulated, as Congress authorized should be done, that all armor and gun steel should be of domestic manufacture, and the Bethlehem Iron Company anticipating these needs took steps to meet the Government requirements as far as possible, and put in the most expensive and complete plant in the world. Confracts were given by the Navy Depart. ment for both gun steel and armor plates; and in February last additional contracts were given to



TARGET NO. 2.

Carnegie, Phipps & Co., of Pittsburg, to turnish 6,000 tons of armor plate for the new vessels. The develop-ment of armor has been principally induced by a continued increase in the power of guns and in the quality of projectiles; but the improvement in the quality and in the manufacture of projectiles has been relatively much greater than in that of the plates, and armor-plate projectiles are now produced which so far as compound and steel plates are concerned, can, from their perfection of quality, toughness, and temper, be fairly denominated as unbreakable and undeformable. The great competitive trial in September, 1890, at

the Annapolis Proving Ground, of three armor-platesone of steel and one of nickel-steel, manufactured at La Creusot, France, and of a compound plate manufactured at Sheffield, England, was the most important ontest of guns against armor ever known before or this continent, and one of the most important ever held anywhere, not excepting the one at Ochta, Russia, in November following. It had been the talk of Europe as well as America, and it has made the Annapolis Proving Grounds familiar in discussion, like Spezia, Portsmouth, Shoeburyness, Gavres, Ochta and other places where tests have been made. The re sults were uniformly excellent. As far as resistance to penetration is concerned, no steel or compound plate had ever equalled the nickel-steel plate tested a Ochta. The Annapolis nickel-steel plate did not possess the hardness of that at Ochta, but it showed a tenneity never before evidenced by any plate, and that, too, with an absence of brittleness which enabled it to withstand its tremendous punishment from the 100-pound 17 3-4 inches long steel-pointed projectiles from the six-inch, and the 210-pound 21 inches long steel-pointed projectiles from the eight-inch breechloading rifles, without a crack of any description. It showed less liability to be broken up by continuous fire than ever before noticed in any plate. since then other valuable tests, both of plates and

projectiles, have been held on the Annapolis Proving Grounds, and also at the new proving grounds at Indian Head. The recent tests of armor-plates at the latter range by the Board, of which Rear-Admiral L. A. Kimberly is president furnishes data which & considered by the Navy Department as onite sufficient to determine the policy to be pursued in the manufacture of armor for practical use on the ships undergoing construction. It seems, therefore, that there will be no further delay of the work on the new vessels because of lack of armor. After careful considcration of the results of the firing upon the six pintes, it was the unanimous decision of the Board that they be placed in the following order of merit: 1. The high-carbon nickel-steel Harvey plate fur-

nished by the Bethlehem Iron Company. 2. The high-carbon nickel-steel plate furnished by

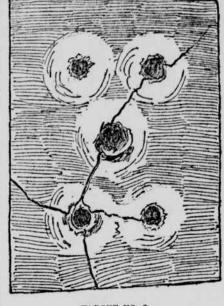
the Bethlehem Iron Company. 3. The high-carbon mickel-plate furnished by Carnegle & Co. 4. The low-carbon nickel-steel Harvey plate fur-

nished by Carnegie & Co. 5. The low-carbon nickel-plate furnished by Carf. The low-carbon steel Harvey plate furnished by

the Bethlehem Company. The right side of plate No. 1 showed remarkable The two projectiles which struck that side

and with the appearance of having been welded to the surrounding metal. while the body was shattered into many fragments. The Roard was of the unanimous opinion that Plates Nos. 1 and 2 are superior to the Crensot steel and nickel-steel plates are superior to the Crensot steel and nickel-steel plates are superior to the Crensot steel and nickel-steel plates are superior to the Crensot steel and nickel-steel plates are superior to the chemical analysis of the plate now in progress will the chemical analysis of the plate now in progress will show that the worls "high" and "low," employed by the manufacturers, have been used arbitrarily, and have but little value for purposes of comparison."

The Navy Department has since decided to go on with the manufacture of the high-carbon nickel-steel plates, or the plates which have been treated by the Harvey process of surface hardening. This treatment is as follows: The armor plate of ordinary mild steel is laid, perfectly flatwise, upon a bed of dry sand or clay, deposited upon the bottom of a fire-brick cell or compartment crected within the heating chamber of a suitable furnace. The face to be treated is left exposed, and the compartment party filled with a granular carbonaceous material, which, having been rammed down upon the plate, is covered with a stratum of sand, upon which is a layer of firebrick. The furnace is raised to an intense heat, about that required to meit cast iron, which is continued for such a period of time as may be required for the absorption by the metal near the upper surface of the plate of a additional 1 per cent, more or less, of carbon, by virtue of which the surface metal acquires the capacity of hardening. After carbonication is complete, the plate is taken from the turnace, and, without removing the carbonaceous material from its surface, is allowed to cool down to the proper temperature for chilling. Jouring cooling, the carbonaceous covering protests the metal and prevents the formation of scale, which, if present, would prevent the fo



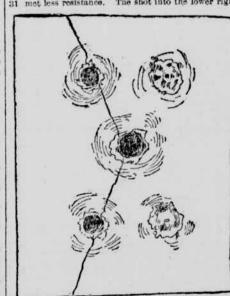
conditions. The total armor required for the twenty-two vessels now building is 15,945,85 tons.

The new proving grounds at Indian Head were secured by the Navy Department a few months ago. It is a tract of 600 acres on the Maryland side of the Potomac, in Charles County, with about a mile of river front and running back to Mattawoma Creek. A ravine, between high binfs, affords advantages for the ordinary proving of guns, and for determining extreme ranges there is a stretch of at least a dozen miles down the river which could be made available. Indian Head is about twenty-five miles from Washington, or fifteen miles nearer than Annapolis. The principal butts and targets are in the valley or ravine, across which the guns are fired. A railroad track runs from the wharf to the firing points, and the barge for the transportation of heavy ordnance is so constructed that the largest gnn may be transferred from the rail-way at the Washington Gun Foundry directly to the rails on the barge, and then transferred to the railway at Indian Head.

The appliances at the proving grounds are of the most modern kind, including electrical apparatus and instruments for determining the speed and force of the projectiles, bomb proofs, and a large travelling railway crane for leandling heavy guns.

The cuts given herewith represent four only of the six armor plates used in the trials at Indian Head on October 31 and November 14. The plates were subjected to tasts more severe than had ever been applied at any foreign Government trials, and the results showed conclusively that the best of the plates, or No. 1, is superior to any foreign plate yet produced, and that Nos. 2 and 3 made records which compare favorsbly with the best. Four shots, one at each coraer, were fired at each plate from the 6-inch gun, with an impact velocity of 2,075 feet a second, and an energy of 2,988 foot-tons, using Firming and Carpenter projectiles of 210 and 250 pommes weight respectively.

The right side of plate No. 1, the high carbon mickel steel plate,



TARGET NO. 4.

hand corner got in to a considerable depth. The reason for this was the inequality in the tempering of the plate, the lower part not being treated with the tempering process. paring process. late No. 2, the high carbon nickel steel, from the

Finite No. 2, the high carbon alckel steel, from the Bethlehem Works, showed a great degree of uniformity as well as resistance to penetration.

The small penetration of the 8-inch shot, the one in the centre of plate No. 3, on November 14, was, in the opinion of the Board, due to the excessive upsetting of the projectile. This plate was of high carbon nickel steel from the Carnegie, Philipps & Co's works. Plate No. 4, of low carbon nickel steel, Harveyed, from the Carnegie Works, lacked in all of those characteristic qualities possessed by the right side of plate No. 1. It was perforated clean through by one of the projectiles, while Nos. 1, 2, and 3 kept out all of the projectiles. All of the armor plates were more or less cracked through, but only two, Nos. 3 and 6, badly, and these two plates alone showed cracking before the fifth shot, the one with the 8-inch projectile. It is observed that the "high carbon" plates show better results than the "low carbon," but it is believed that the chemical analysis of the plates now in progress will show that the words "high" and "low" employed by the manufacturers, have been used arbitrarily and have little value for purposes of comparison.

A CLEVER MECHANICAL DETECTIVE An uptown jeweller has a clever mechanical detective

for preventing articles of jewelry from being stolen from the trays while they are in the cases, or when a sales man is showing the articles in a tray to a customer Electricity is the agency used. In the bottom of the showcase are a number of copper strips connected with electric batteries and an alarm bell. On the bottoms of the trays are copper strips corresponding with those in the bottom of the showcase. Each article of jewelry in the trays is held in a small spring clip, and the article holds the two points of the clip from coming in contact when the piece of jewelry is in the clip. As soon as it is removed, however, the two points coming in contact form a circuit and an alarm-bell rings. If the trais taken out of the case and one of the articles is re-moved, the bell rings immediately when the tray is returned to its place. The salesmen have little wooden pins which they stick in between the two points of the quanties. The two projectiles which struck that side clip to prevent the alarm-bell from ringing when they penetrated not more than seven inches, the head wish to remove a piece of jewelry. Kleptomania is not rampant in this store. BREEDING IN TEXAS

JOHN A. MORRISS WORK THERE

MORE FAME FOR THE LONE STAR STATE-NOTE

ABOUT HORSES GENERALLY.

John A. Morris has his own ideas in regard to breeding, and intends to breed the best on his own established lines of breeding. He is the owner of 12,000 acres of the finest land in the great loss star State, in the pleasantest portion of it. The mach is in a locality which is in the healthlest part of the continuous lit is well watered and wooded. Southwest. It is well watered and wooded, and southwest. It is went and a supplied that becoming the resort of consumptives. The air is so equable at all seasons of the year that it cannot by excelled, in the opinion of experts in breeding, for the excelled, in the opinion of experts in breeding, for the purpose. With the choice selection of mares which he has sent there, Mr. Morris is sure to make a success of his venture in the ranks of the breeders in the country. Like all things in whice he takes an interest, it is sure to be done systematically, and every attention is paid to details, even to the smallest item. He begins and the country is control in regard to everything. At his have himself posted in regard to everything. At his how at Throgg's Neck Mr. Morris may be seen at the bea advantage, as he has his record book of the many many being bred on both sides of the Atlantic.

of course it is customary to place the pick of the stable first, no matter where the animal is bred, a must please Mr. Morris to find that the highest the yearling is one of his own breeding and bred on the Texas establishment. Mr. Morris purchased several the choicest specimens sold at the yearling sales. He also will ruce several by such sires as Gaiopin, spring field. Barcaldine, and other leading sires in England, but the highest-bred is the bay daughter Hudson (a brother to Barnes), dam Venture, by ins Kyrle Daly, dam Jetsome. The readers of The Tab une should make a note about this filly as she is the superior to Georgia, or any other owned by Mr. Morris. Nevertheless Mr. Morris's recent \$15,000 purchase at Long Branch is a grand filly and more than instilles the high opinion held by the trainers at Long Branch in regard to her, but Risk, as the degliter of Hudson is appropriately named, holds her safe. Risk has all that is desirable in a young-ster—size, bone, speed and perfect conformation—in that she is all that could be wished for in an ind. vidual filly. That a brilliant future is before her her trainer, Wyndham Walden feels certain.

Venture, the dam of Risk, has another yearing by Howard, but was bred to Cyclops last spring, and is in foel to the fleet son of Mortemer, whose don't was reported in The Tribune. But the mare will be bred back to Hudson next season. Whoever outs the colt or filly which can beat the filly Risk should get the money. Here is the list of the horses in Texas belonging to Mr. Morris, besides Venture: Imp. Serene, by Sterling, dam Schate. Imp. Prosperity, by Zealot, dam Wealth.

Imp. Prosperts, by Peter, dam Rosaria.
Imp. Printy, by Macaroon, dam Pillage, bred to Cayan.
Imp. Proserpine, by Robert the Devil, dam Polonaia,
bred to Screen, winner of the Cambridgeshire of 1800.
Imp. Princess, by Geo. Frederick, dam Palatine, bred

to Hudson. Imp. Muskroom, by Galliard, dam Parvenue Imp. Opalercent, by Melton—Cpaline.
Imp. Persis, by Zenophou, dam Perpica, byed to Cyclon.
Imp. Cheese Straw, by Muncaster, dam Cheese.

bred to Britannic.

Imp. Judy. by Sterling, dam Marriont.

Imp. Terre Haute, by Marden, dam Indiana, bred to Cyclops. Imp. St. Genevieve, by Pellegrino, dam Planta, brei

to Hudson. o Hudson.
Persistent, by Sir Modred, dam Parthenia.
Nimble, by Plevna, dam Achsah, bred to Cyclops,
Zitteila, by Barnes, dam Bonnella.
Zulu, by Pizarre, dam Zoo Zuo, bred to Hudson. Alice, by Stonenenge, dam Mary Ruckley.

Ida West, by Reform, dam Blue Lodge, bred to Bri

Imp. Veronica, by Trappist, dam Doe, bred to Hudson Vishnu, by Hindoo, dam Mattle Amelia, bred to Lim Farrell. Winsome, by Kyrle Daly, dam Winifred, bred to Cr.

Imp. Tournure, by Ben Battle, dam Catmeni. Affection, by St. Blaise-Affinity.
All Hopes, by Tom Ochiltree, dam Asp. Imp. Coraline, by Tontine, dam Da-Myselle. Everywhere, by Tom Ochiltree, dam Gulaare. Mary Corbett, by Longfellow, dam Belle Kaight, bree

to Cyclops.

Prudery, by Duke of Magenta-Virginity, dam of Prig a highly tried yearling.

Queen Little, by King Ernest-Minoraly, bred to Cyclops. Lady McNairy, by Duke of Magenta; dam Sudic

Nairy. Luna, by Asteroid, dam Glenduff. Mamie Russell, by Eolus, dam Tillie Russell, bed b Cyclops. Ambition, by Tom Ochiltree, dam B. V. S.

Imp. Certamen, by Ben Battle, dam Makesure. Imp. Contradiction, by Sterling, dam Camistry, bed Pickle, by Tom Ochiltree, dam Paithless.

Flying Duchess, by Tom Ochiltree, dam Lowland Doc

Frailty, by Prince Charlie, dam Blunder Imp. Haste, by Energy, dam Garron. Hope, by Tom Ochiltren-Hilternia, bred to Hudsen. Jet, by Vaulhalt, dam Heatherbell, bred to Hudsen. Minnie Walden, by Virgillian, dam Zadie E, bed w

Mess Kader, by Virgillian, dam Rosa Kuder, Triviality, by Pleona, dam Frivolity. Queen Sabe, by Voltigeur, dam Mary Corbett, tred w

Queenstown, by Tom Ochiltree, dam Hibernia, bred to

Cyclops.
Rosa Kader, by Abd-el-Kader, dam Rosa Scotilia, by Bonnie Scotland, dam Janista Sapphire, by Tom Ochiltree, dam Jet.

Mr. Morris will surely build up a reputation for Texas as a breeding country. It would be difficult to select another assortment of mares so finely bred

and come from so many different winning families in the thoroughbred world. The coit and filles by Britannic are a revelation to all who have seen them They are beautiful animals, and every one on the place says that the other sires are not equal to lintann Hudson is now the pet of the Texas much since his yearlings have shown so well, Risk by olds being the champion of the Morris yearlings. Mr. Morris has also a number of trotting stallion

and highly bred trotting mares on his ranch, and the influence of the choice strains of blood on the native horses of that section will make itself feit so that in a few years every farmer in the country will be beech ing one or two mares with the result that instead of bronchos, 13 hands high, they will send to the market horses equal in size, breeding and quality to any bred in the country.

At Morris Park the yearlings have all been trick.

and the trainers have settled down for the winier. The track is kept in condition so that the boys cal get a good so inclined. Frank A. Ehret's stable is the largest a the track. Matt Allen, the trainer, is having a stable built to suit him. The entire front is of glass, and it is perfectly von:llated. The change since it will occupied by Charles Reed is wonderful, as he kept i so dark that any person who managed to get in the stable would need a lantern and a search warrant find one of the horses. The stable was one of its most successful on the turf in the season just past The winnings were \$104,000. The horses went into winter quarters in good shape, although Allen is doing a little repairing to some of them, such as a had here and there. Yorkville Belle, of course, is see star of the stable. She is without doubt one of the grandest fillies seen in years. She is growing every day, and as she is in every three-year-old stake of and importance, and such flyers as His Highness and #4-Florian are out of her way, she should be well as a three-year-old winner in 1802. Cisrcuden is one of Allen's pets. He is without doubt one of the fastest "milers" in America, as he was in the less at the mile post in the Metropolitan Handicap, many frainces timing the mile in 1:37. He is morne soundly, and Allen says that he will be with them in the handleaps of 1892. Clarendon is one of the heaflest horses in training. Size will be one of the drawbacks of some of the St. Blaises, although he gets many that are less fian the average size. San Just

backs of some of the St. Blaises, although he gen many that are less fian the average size. San Juan and Peter are in fine shape. Allen says he will not let his horses get so big this winter as he did had year. Demuth looks Just the same. He shines as if he were in training. Rey Del Rey picks up very rapidly and looks big. Heligate is deing nicely. Fred Lee seems to be an attraction for the Guttenburgers, as Allen is called upon almost every day to put a price on some of his horses. Early one merchant and said that a party in a coach came to buy Peter, and said that the reason they came before dayligh was they wanted everything quiet. "Now, how much do you want for him?" "\$15,000," was the reply. There was a fight in the carriage at once, and a war of words began. The capitalist of the party talked the lossest, saying that he was out the conch-hire and the better part of a night's rest by going to Morri's Park to try is may a \$15,000 horse for \$2,500. "For two pins I would make you all walk home," he cried.

When the yearing sales were held, Mr. Ehret and Colonel McLewee bought a number of colts that looks racing-like and were bred to suit them, Alea selecting them, with the result that it would be hard to find a handsomer lot than is now being trained by Mr. Alea. Their trials were reported in The Tribune. When they carriage the state it would be hard to find a handsomer lot than its now being trained by Mr. Alea. Their trials were reported in The Tribune. When yearlings run three-eighths in thirty-five seconds, no matter on what track it takes place, the performance is nothing short of marvellous. With last year's experience to guide the stable, and the same able manage lence to guide the stable, and the same able manage lence to guide the stable, and the same able manage lence to guide the stable, and the same able manage lence to guide the stable, and the same able manage lence to guide the stable, and the same able manage lence to guide the stable, and the same able manage lence to guide the stable, and th